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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,924	11/13/2003	Douwe Johannes Runia	TS 6413 USA.	9876
23632	7590	08/11/2006	EXAMINER	
SHELL OIL COMPANY P O BOX 2463 HOUSTON, TX 772522463			STEPHENSON, DANIEL P	
			ART UNIT	PAPER NUMBER
			3672	

DATE MAILED: 08/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/712,924

Applicant(s)

RUNIA ET AL.

Examiner

Daniel P. Stephenson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-9, 11, 12, 14, 15, 17 and 18 is/are rejected.
- 7) ☒ Claim(s) 4, 10 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrell et al. '023. Harrell et al. '023 (Figure 5) discloses a bottom hole assembly attachable to a tubular drill string. The bottom hole assembly has a drill bit (54), a drill steering system (60), and a surveying system (62). The bottom hole assembly is provided with a longitudinal internal passage for at least part of an auxiliary tool, such as the production tubing. The drill steering system is provided in the form of a mud motor comprising a tubular stator and a rotor arranged in the tubular stator. There is a bit shaft, which is arranged to be driven by the rotor and suitable for transmittal of torque to a drill bit. The rotor is releasably connected to the bit shaft. After it is removed from the hole, after disconnection from the bit shaft, the rotor is capable of being longitudinally removed from the stator. Harrell et al. does not explicitly state that part of the auxiliary tool is at least 5 cm in diameter. Estes (col. 3 lines 30-33) discloses the use of a bit with a tool port and passage to allow a tool with a diameter of at least 5 cm. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the diameter of Estes on the bit of Harrell et al. '023. This would be done because it is common knowledge within the art that the size of the passage would be relative to the size of the bit and the size of the hole as a matter of design.

3. Claims 1-3, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over the WIPO document '488 to Runia (hereafter WIPO '488) in view of Schuh. WIPO '488 (Fig. 1-3, pages 4-11) discloses a tubular drill string, which includes at its lower end a bottom hole assembly with a drill bit. The drill string includes a passageway for an auxiliary tool (40) from a first position interior of the drill string above the bottom hole assembly to a second position wherein at least part of the auxiliary tool is exterior of the drill string below the bottom hole assembly. The passageway can be selectively closed. It is used to drill so as to progress the drill string into the earth formation, until a tool operating condition is met. Then opening the passageway and passing the auxiliary tool from the first position through the passageway to the second position where it is operated. The passageway is then closed and drilling is continued. Closing the passageway entails retrieving the auxiliary tool fully into the drill string. The auxiliary tool can be a logging tool. Multiple auxiliary tools can be deployed through the drill string and operated external of the drill string. The auxiliary tool may be pumped down (page 11 lines 14-16) the drill string. The bottom hole assembly comprises a removable closure element (18) adapted to selectively close the passageway. The closure element is broadly read as a surface retrievable pad, since it is retrievable at the surface after the drill is tripped up. WIPO '488 does not disclose that there is a rotary drill steering system, and a surveying system located in the bottom hole assembly. Schuh (Fig. 1, 3, 6A-6D) discloses a steering system for use with a rotary drill string. It operates in conjunction with a survey system/MWD. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the steering/survey system of Schuh with the apparatus of WIPO '488. This would be done since it is common knowledge within the drilling art to add steering mechanisms to a non-steering rotary

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bit if directional drilling is desired and the apparatus of Schuh allows for directional drilling with a high degree of control as taught (col. 2 lines 27-41).

4. Claims 7-9, 11, 14 and 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over WIPO '488 in view of Schuh and further in view of Estes. WIPO '488 in view of Schuh shows all the limitations of the claimed invention, except it does not disclose that part of the auxiliary tool is at least 5 cm in diameter. Estes (col. 3 lines 30-33) discloses the use of a bit with a tool port and passage to allow a tool with a diameter of at least 5 cm. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the diameter of Estes on the bit of WIPO '488 in view of Schuh. This would be done because it is common knowledge within the art that the size of the passage would be relative to the size of the bit and the size of the hole as a matter of design.

5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over WIPO '488 in view of Schuh and Estes as applied to claim 8 above, and further in view of Comeau et al. '063. WIPO '488 in view of Schuh and Estes shows all the limitations of the claimed invention, except it does not disclose that the survey system is a tubular sub that forms part of the passageway for the auxiliary tool. Comeau et al. '063 discloses to us of a tubular sub MWD system (378). This system has a longitudinal passage for the passage of various tools. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the MWD of Comeau et al. '063 with the apparatus of WIPO '488 in view of Schuh and Estes. This would be done because it is common knowledge within the wellbore art to have tubular MWD's for the allowance of fluid to pass by them.

***Allowable Subject Matter***

6. Claims 4, 10 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

7. Applicant's arguments filed 5/24/06 have been fully considered but they are not persuasive.

8. With regards to applicants assertion that none of the references disclose that the part have a diameter of at least 5 cm, this argument is now moot in view of new grounds of rejection.

9. With regards to the applicant's assertion that the WIPO '488 in view of Schuh rejection utilizes impermissible hindsight, the examiner respectfully disagrees. In response, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In the present case, it is common knowledge within the art of drilling to utilize a steering system on a non-steering rotary bit if directional drilling is desired.


***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel P. Stephenson whose telephone number is (571) 272-7035. The examiner can normally be reached on 8:30 - 5:00 M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
David Bagnell  
Supervisory Patent Examiner  
Art Unit 3672

DPS 